Claims

1. Peptide for the prevention or therapeutic treatment of HIV virus infection capable of interacting with an antibody specific for an antigen of the envelope of said virus and obtained from an HIV-positive patient belonging to the "long-term nonprogressor" group, comprising an amino acid sequence which mimics a conformational epitope of an antigen of said envelope without, however, corresponding to a continuous amino acid sequence of this antigen.

2. Peptide according to claim 1, according to which the antigen of the envelope is represented by the envelope protein gp160.

3. Peptide according to claim 1 or 2, characterized in that this peptide may comprise the sequences 1 to 11

SEQ ID NO: 1 Phe Asn Leu Thr His Phe Leu
SEQ ID NO: 2 Glu Gly Trp His Ala His Thr
SEQ ID NO: 3 Lys Leu Asn Trp Met Phe Thr
SEQ ID NO: 4 Ser Thr Asn Trp Met Phe Thr
SEQ ID NO: 5 Ala Met Pro Leu Pro Tyr Thr Phe
SEQ ID NO: 6 Asp Ser His Thr Pro Gln Arg
SEQ ID NO: 7 Val Ser Phe Thr Pro Ser Phe
SEQ ID NO: 8 His Ala Ala Leu Ser Met Asn Thr His Ala Leu Met
SEQ ID NO: 9 Ala Trp His Glu Ser Arg Ala
SEQ ID NO: 10 Phe Lys Thr Ala Tyr Pro Thr
SEQ ID NO: 11 Ser His Ala Leu Pro Leu Thr Trp Ser Thr Ala Ala

4. Peptide comprising the linkage of at least two peptides according to one of claims 1 to 3.

5. Peptide according to claim 4, comprising the duplication of identical peptides.

6. Peptide according to claim 5, in which the coupling of the two peptides occurs by means of a "spacer" arm consisting of the amino acid sequence Gly Pro Gly

7. Conjugate comprising at least one peptide according to one of claims 1 to 6, bound to a carrier

molecule in order to induce or enhance the immunogenicity of said peptide.

8. Conjugate according to claim 7, according to which the carrier molecule comprises at least one helper T epitope of the HIV virus.

9. Conjugate according to claim 8, whose carrier molecule comprises the p24E and T1 epitope of the HIV virus

10. Conjugate according to claim 9, comprising a peptide resulting from the duplication of the sequences NO: 1, NO: 3 or NO: 4 according to claim 6, said peptide being bound on the N-terminal side to the p24E epitope and on the C-terminal side to the T1 epitope by means of 2 "spacer" arms.

11. Conjugate according to claim 10, characterized in that the 2 spacer arms are identical and consist of the linkage Gly Pro Gly and in that it comprises any one of the sequences 12 to 14

SEQ ID NO: 12 Gly Pro Lys Glu Pro Phe Arg Asp Tyr Val Asp Arg Phe Tyr Lys Gly Pro Gly Lys Leu Asn Trp Met Phe Thr Gly Pro Gly Lys Leu Asn Trp Met Phe Thr Gly Pro Gly Iys Gln Ile Ile Asn Met Trp Gln Glu Val Glu Lys Ala Met Tyr Ala

SEQ ID NO: 13 Gly Pro Lys Glu Pro Phe Arg Asp Tyr Val Asp Arg Phe Tyr Lys Gly Pro Gly Ser Thr Asn Trp Met Phe Thr Gly Pro Gly Ser Thr Asn Trp Met Phe Thr Gly Pro Gly Iys Gln Ile Ile Asn Met Trp Gln Glu Val Glu Lys Ala Met Tyr Ala

SEQ ID NO: 14 Gly Pro Lys Glu Pro Phe Arg Asp Tyr Val Asp Arg Phe Tyr Lys Gly Pro Gly Phe Asn Leu Thr His Phe Leu Gly Pro Gly Phe Asn Leu Thr His Phe Leu Gly Pro Gly Lys Gln Ile Ile Asn Met Trp Gln Glu Val Glu Lys Ala Met Tyr Ala

12. Recombinant vector comprising a functional expression cassette allowing the expression of a

polynucleotide encoding a peptide according to one of claims 1 to 11

13. Recombinant vector according to claim 12, characterized in that it is an adenovirus, a poxvirus, a baculovirus, a bacteriophage or a plasmid.

14. Therapeutic or prophylactic composition for HIV infection, in particular intended for vaccine use, whose active ingredient comprises a peptide according to one of claims 1 to 11 and/or a recombinant vector encoding said peptide according to either of claims 12 and 13.

15. Composition according to claim 14, whose active ingredient is in the form of a formulation combined with a compatible adjuvant for administration of an effective dose by the mucosal or parenteral route.

16. Use of a peptide according to one of claims 1 to 11 and/or of a recombinant vector according to either of claims 12 and 13 as reagent for the diagnosis of HIV, said diagnosis comprising the evaluation, from a blood sample, of the humoral and/or cell-mediated response specific for this peptide.

17. Use of a peptide according to one of claims 1 to 11 and/or of a recombinant vector according to either of claims 12 and 13 as reagent for the diagnosis of the susceptibility of subjects infected with the HIV virus to rapidly develop AIDS.

18. Use of a peptide according to one of claims 1 to 11 and/or of a recombinant vector according to either of claims 12 and 13 for the preparation of a therapeutic or prophylactic composition intended for the treatment or prevention of HIV infection.

19. Use of a peptide according to one of claims 1 to 11 and/or of a recombinant vector according to either of claims 12 and 13 for stimulating *in vitro* cells of the immune system of an individual, said cells then being intended to be reinjected into the body of the individual after stimulation.